Attorney's Docket No. <u>005950-836</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)
Shenggao Liu et al.	Group Art Unit: 1626
Application No.: 10/622,130	Examiner: Rei Tsang Shiao
Filed: July 16, 2003) Confirmation No.: 2442
For: HETERODIAMONDOIDS)
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RESPONSE TO RESTRICTION REQUIREMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In complete response to the Office Action dated November 24, 2004, Applicants submit herewith a one month extension of time extending the period for response from December 24, 2004 to January 24, 2005 and the following response.

In the Office Action, the Examiner sets forth a restriction requirement among ten (10) groups of claims, with Groups VI – VIII being subjection to further restriction if elected.

Applicants respectfully traverse the restriction requirement as set forth in the Office Action.

Through the identification of these ten groups with three being subject to further restriction if elected, the Examiner is requiring the dissection of Applicants' invention into a large number of subgroups. As such, the Examiner, rather than the Applicants, is identifying what Applicants regard as their invention through the use of the restriction requirement. Applicants respectfully submit that it is improper to use a restriction requirement, as the Examiner has done, to define Applicants' invention, and this dissection of Applicants' invention into a large number of subgroups, as defined by the Examiner, constitutes a refusal on the part of the Office to examine the claim that Applicants believe to best represent their invention.

Applicants submit that it is improper for the Office to refuse to examine that which Applicants regard as their invention unless the subject matter of the claims lacks unity of invention. Specifically, in *In re Weber*, 580 F.2d 455, 198 USPQ 328 (CCPA 1978), the court articulated the general proposition that:

[A]n applicant has a right to have *each* claim examined on the merits. If an applicant submits a number of claims, it may well be that pursuant to a proper restriction requirement, those claims will be dispersed to a number of applications. Such action would not affect the right of the applicant eventually to have each of the claims examined in the form he considers to best define his invention. If, however, a single claim is required to be divided up and presented in several applications, that claim would never be considered on its merits. The totality of the resulting fragmentary claims would not necessarily be the equivalent of the original claim. Further, since the subgenera would be defined by the examiner rather than by the applicant, it is not inconceivable that a number of the fragments would not be described in the specification.

Id. at 331. (Emphasis in original). Accordingly, the Examiner's dissection of the claimed subject matter is improper.

Applicants further submit that the inventions of Groups I - IX are closely related and that a proper search of any of the claims should, by necessity, require a proper search of the others. Thus, Applicants submit that all of the claims can be searched simultaneously, and that a duplicative search, with possibly inconsistent results, may occur if the restriction requirement is maintained.

Applicants submit that any nominal burden placed upon the Examiner to search accordingly to determine the art relevant to Applicants' overall invention is significantly outweighed by the public's interest in not having to obtain and study many separate patents in order to have available all of the issued patent claims covering Applicants' invention. The alternative is to proceed with the filing of numerous applications, each consisting of generally the same disclosure, and each being subjected to essentially the same search, perhaps by different Examiners on different occasions. This process would place an unnecessary burden on both the Patent and Trademark Office and on the Applicants.

Regardless of whether the two inventions are independent or distinct, Applicants respectfully assert that the Examiner need not have restricted the application. MPEP § 803 requires that "[i]f the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to independent or distinct inventions."

Therefore, it is not mandatory to make a restriction requirement in all situations where it would be deemed proper.

In the interest of economy, for the Office, for the public-at-large, and for Applicants, reconsideration and withdrawal of the restriction requirement are requested.

Nevertheless, in order to comply with the requirements of 37 C.F.R. § 1.143, Applicants indicate below an election of one group for examination. As such, Applicants elect, with traverse, to prosecute the invention of Group I, namely claims 1-21 and 26-37, drawn to heterodiamondoid compounds having one heteroatom, wherein the heteroatom is nitrogen and wherein the functional groups of the heterodiamondoid compound are not selected from a group having a heteroaryl moiety.

The Examiner also set forth that in the event that Group I is elected, election of a single species for searching purposes is required. With regard to this election of species, Applicants elect, with traverse, compound 17 as illustrated in Figures 7 and 8 and discussed in Example 10 for the purposes of searching only. Through election of compound 17, Applicants do *not* intend to exclude functionalized heterodiamondoid compounds having a nitrogen heteroatom within the diamondoid nucleus (which compounds are functionalized with substituents other than heteroaryl moieties, as set forth in Group I), as the present application clearly discloses the functionalization of such heterodiamondoid compounds, including appropriate functionalization reactions.

It is believed that claims 1, 2, 4, 7, 8, 10-12, and 13-15 within the elected group (Group I) are readable upon the elected species as defined above.

Applicants have no intention of abandoning any non-elected subject matter and expressly reserves the right to file one or more continuation and/or divisional applications directed to the non-elected subject matter.

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Applicants earnestly solicits favorable consideration of the above response and early passage to issue the present application. The Examiner is invited to contact the undersigned at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted, BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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Dated: January 24, 2005